

Town Of Chatham Department of Community Development



Town Annex 261 George Ryder Road Chatham, MA 02633

TELEPHONE (508) 945-5168

FAX (508) 945-5163

CHATHAM BOARD OF SELECTMEN AGENDA REPORT

TO:

Honorable Board of Selectmen

Jill R. Goldsmith, Town Manager

FROM:

Deanna L. Ruffer, Director

DATE:

February 10, 2015

SUBJECT:

Proposed Bylaw Amendments: Flood Plain District/Conservancy District

BACKGROUND AND DISCUSSION

At the 2014 Annual Town Meeting, the Planning Board sponsored *Article 35 - Zoning: Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) Changes.* The single objective of that article was to adopt the new FEMA flood maps into the local zoning bylaw. The article passed at Town Meeting resulted in the creation of two different regulatory boundaries within the zoning bylaw related to the floodplain:

- 1. Flood Plain District Boundary Delineated by 2014 Flood maps
- 2. Conservancy District Boundary Delineated by 1998 flood maps

Leading up to the 2014 Town Meeting, the Planning Board promised to re-visit this topic and explore in greater detail what impact the changes to the conservancy district boundary would have on properties impacted by the new 2014 FEMA flood zone maps. At the request of the Planning Board, the Community Development Department analyzed the Conservancy District and Floodplain District sections of the Zoning Bylaw. Staff conducted a spatial analysis to gauge the level of impact to developed and undeveloped property throughout the town. A comparative bylaw analysis was also conducted to evaluate how similar communities regulate land use within coastal areas susceptible to flooding. The analysis revealed several items within the bylaw that warranted discussion and potential updating.

Guided by the policy direction provided by the Planning Board, staff developed several recommended amendments to the bylaw. The goals of the proposed amendments are as follows:

Provide a Balanced Approach:

- Discourage development of vacant land within the Flood Plain
- Preserve certain property development rights for properties impacted by map changes.

Proactive Flood Hazard Mitigation

- Enable property owners to elevate existing structures
- Remove regulatory obstacles

Update & Streamline Certain Provisions of the Bylaw:

- Add clarity & remove certain items inappropriate for regulatory oversight under zoning
- Recognize that certain items are already regulated under State and local conservation regulations & State building code.

Staff used the model floodplain bylaw drafted by the Woods Hole Oceanographic Institute and the Massachusetts Coastal Zone Management Agency as well as the Town of Oak Bluff's Floodplain District Bylaw as templates for many of the recommended amendments. The Community Development Department also worked closely with the Director of Natural Resources and the Conservation Agent to identify areas of regulatory overlap between zoning and conservation.

The major recommended amendments are summarized as follows:

- 1. Re-name the Conservancy District to "Shoreline Protection District" to improve clarity regarding the purpose of this section of the bylaw as it relates to areas of regulatory overlap between zoning and conservation
- 2. Relocate items pertaining to construction, alteration and maintenance of structures from the Shoreline Protection District (formerly Conservancy District) section into the Flood Plain District section; to improve clarity and reinforce the major purpose of the Shoreline Protection District, the majority of which deals with the regulation of accessory uses and environmental maintenance activities.
- 3. Remove the 20 foot height restriction for residential structures within the Shoreline Protection District (former Conservancy District) to facilitate proactive hazard mitigation for properties vulnerable to flood hazards. (Note: The current overall 30 foot height limit remains in effect).
- 4. Preserve certain development rights for vacant lots affected by changes to 2014 flood maps by grandfathering portions of a lot previously designated as buildable but which has since been added to the flood zone.
- 5. Streamline Shoreline Protection District section by moving certain items already regulated by State and Local wetlands protection regulations from Special Permit use to Permitted use.

The Planning Board discussed these topics at four separate meetings held between October 2014 and February 2015. After reviewing the analysis and recommended amendments, the Planning Board has decided to proceed with the amendment process and has voted to act as petitioner for this warrant article at the 2015 Annual Town Meeting.

FISCAL IMPACT

N/A

STAFF RECOMMENDATION

It is respectfully recommended that the Board:

Refer this proposed amendment back to the Planning Board so that it may proceed with the statutory public hearing process required under M.G.L. Chapter 40A Section 5. - Scheduled for March 17, 2015

Thank you for your consideration. Should you have any questions regarding the foregoing, please contact me at 508-945-5168 or druffer@chatham-ma.gov.

Attachments:

Proposed Warrant Article Article ## - Zoning: Amend Conservancy District and Flood plain District

Article ## - Zoning: Conservancy District and Flood Plain District Changes

Strikethrough = language proposed for deletion

<u>Underline</u> = language proposed for inclusion **Bold Italicized Words** are defined in the existing bylaw

DRAFT AS OF 2/4/15

To see if the Town will vote to amend its Protective (Zoning) Bylaw, **Table of Contents, Section IV, A Conservancy Districts** as follows:

SECTION IV OVERLAY REGULATIONS Page 25 A. Conservancy Shoreline Protection Districts Page 25 1. Purpose Page 25 2. Permitted Uses Page 25 3. Special Permit Uses Page 26 4. Prohibited Uses Page 27 S. Location Page 28 6. Procedures Page 28

Also amend, Section II., Definitions, Subsection B., as follows:

- 26. "CATWALK" means an elevated structure, usually located within a Conservancy Shoreline Protection District, used as a pedestrian walkway to traverse fresh or salt meadow, marsh, meadow bank, dune or beach. The term shall include PLANK WALK. (5/12/97 ATM) (5/??/15)
- 78. "PIER" means an elevated structure located within a Conservancy Shoreline Protection District, used to access fresh or salt water or traverse fresh or salt meadow, marsh, meadow bank, dune or beach and which extends beyond Mean Low Water (MLW) or beyond the Natural High Water Mark of a fresh water body. (5/12/97 ATM) (ATM 5/??/15)
- 108. "UPLAND, BUILDABLE" means a contiguous area of land, exclusive of any land in a Conservancy Flood Plain District as defined herein, and which is not less than four (4) feet above the water table. Groundwater elevations shall be determined by on-site investigations conducted by a licensed engineer or land surveyor, and shall be adjusted for seasonal fluctuations using the U.S.G.S. procedure set forth in Estimating Highest Groundwater Levels for Construction and Land Use Planning Cape Cod, Massachusetts.

Also amend, Section III District Regulations, Subsection A as follows:

A. Type of Districts

For the purpose of this Bylaw, the Town of Chatham is divided into the following basic districts:

Residential: R20, R20A, R30 (5/12/97 ATM), R40, R40A (5/16/01 ATM), R60

Small Business: SB

General Business: GB1, GB2, GB3

Industrial: I

Residence-Seashore Conservancy: RC3

Municipal: M

Municipal Conservancy: M/C (11/7/95 STM)

In addition the following overlay districts are established:

Conservancy Shoreline Protection
Flood Plain
Airport Hazard Area
Water Resource Protection (5/12/96 ATM)
Flexible Development

The specific locations and definitions of the overlay districts are set forth in Section IV of this Bylaw.

Also amend, Section III District Regulations, Subsection D. District Area Requirements, sub-section 3. Specific Requirements, sub-paragraph k. Erosion Control as follows:

k. Erosion Control

If the Building Inspector determines that erosion controls are necessary, erosion controls adequate to prevent damage to a Conservancy-Shoreline Protection District shall be required for any project, building or structure which will alter in any manner land within three hundred (300) feet of a Conservancy Shoreline Protection District. Erosion controls shall be adequate to prevent eroded material from entering, or siltation of wetlands within, a Conservancy Shoreline Protection District. Erosion control measures shall be taken prior to the commencement of work and shall remain in place until the disturbed areas have been stabilized permanently.

Also amend, Section IV., Overlay Regulations as follows:

SECTION IV OVERLAY REGULATIONS

A. Conservancy Shoreline Protection Districts

1. Purpose

Conservancy Shoreline Protection Districts are overlay districts intended to:

a. preserve and maintain the ground water supply on which the inhabitants depend;

- b. protect the purity of coastal and inland waters for the propagation of fish and shellfish and for recreational purposes;
- c. protect the public health and safety;
- d. protect persons and property from the hazards of **flood** and tidal waters which may result from unsuitable development in or near swamps, ponds, bogs and marshes, along water courses or in areas subject to flooding, extreme high tides and the rising sea level
- e. preserve the amenities of the Town and to conserve natural conditions, wildlife and *open* space for the education and general welfare of the public.

2. Permitted Uses

Notwithstanding any other provision of this Bylaw the following uses and activities are permitted in Conservancy-Shoreline Protection Districts:

- a. Fishing, cultivation and harvesting of shellfish, worms for bait, and the excavation and construction of areas for the cultivation and harvesting of shellfish and other marine foods. Salt marsh having, dune or marsh grass planting, and the manual harvesting (without use of machinery) of marine algae, Irish moss, wild shrub fruits and seeds.
- b. Outdoor recreation activities including, hiking, boating, trapping, hunting, fishing, horseback riding, skeet and trap shooting, and shooting preserves, provided any *structures* related thereto do not destroy the beneficial character of the Conservancy—Shoreline Protection District
- c. The installation of floats, provided they are located below mean low water, or the Natural High Water Mark on fresh water ponds, and are permitted by the Harbormaster.
- d. The maintenance to minimum legal and practical width and height of all roads and driveways that exist as of July 1, 2007. (5/12/08 ATM)
- e. The construction and maintenance of a driveway or roadway of minimum legal and practical width where no alternative means of access from an established way is available, provided that such driveway or roadway shall be constructed of pervious material and in a manner which permits the unobstructed flow of water.
- f. The installation, operation and maintenance of underground and overhead utilities limited to electrical, communication, sewer, potable water and gas lines, provided the surface vegetation is restored substantially to its original condition.
- g. The use or improvement of land or water for agricultural purposes provided, however, that any subsequent non-agricultural uses of land which was altered for agricultural purposes

may be regulated, restricted or prohibited in accordance with any condition stated herein.

- h. The dredging of navigational channels or mooring basins by the Town, State or Federal government.
- i. The construction and maintenance of Town Landings, public boat launching ramps, public beaches, including beach nourishment of Town owned beaches and landings, except on salt marsh and land containing shellfish as identified by the Shellfish Warden and the Division of Marine Fisheries.
- j. Mosquito control as approved and carried out by the Cape Cod Mosquito Control Project.
- k. Maintenance dredging of existing private channels and marine facilities provided that such maintenance dredging shall not increase the scope of the original dredge project licensed under MGL Ch. 91.
- I. Expansion dredging of existing private channels or marine facilities with the approval of the Shellfish Warden, Conservation Commission, Division of Marine Fisheries, the Division of Waterways, and the U. S. Army Corps of Engineers. Said expansion shall be accomplished without dredging in marsh areas or land containing shellfish as identified by the Shellfish Warden and the Division of Marine Fisheries.
- m. Beach nourishment except on salt marsh areas or productive shellfish tidal flats as identified by the Division of Marine Fisheries or the local Shellfish Department; dune nourishment; non-structural bank and dune stabilization; and coastal engineering structures which are otherwise approved under MGL c. 131 Sec. 40 and the Town of Chatham Wetlands Protection Bylaw, and not prohibited by a restriction filed in the Barnstable County Registry of Deeds pursuant to MGL c. 130 Sec.105. (10/24/89 STM).
- n. The installation of unpaved trails and fences less than sixty (60) percent solid and at least six (6) inches above grade, provided that such installation will be done in a manner that does not deflect, displace or channelize flood waters or increase the velocity of flow.

3. Special Permit Uses

Notwithstanding any other provision of this Bylaw the following uses and activities in a Conservancy Shoreline Protection District require a Special Permit from the Zoning Board of Appeals.

a. The construction of catwalks, piers*, ramps, stairs, unpaved trails, boathouses, boat shelters, roadside stands, fences, wildlife management shelters, foot bridges, observation decks or shelters, tennis courts, and structures used in conjunction with a fishing use. With the exception of stairs, steps and walkways, (see footnote 3 Appendix II) structures shall conform to the street setback and abutters setback for the district in which the lot is located, and shall be constructed so as to permit the reasonably unobstructed flow of water and preserve the natural contour of the area. Structures shall not exceed twenty

(20) feet in height. Provided there is no expansion, those dwellings which existed prior to January 16, 1992 and are required by the Building Inspector to be elevated in accordance with FEMA Regulations, shall not be required to conform to the twenty (20) foot height restriction. (5/11/92 ATM). (5/??/15 ATM)

b. Non-Residential buildings not intended for use as living quarters or *Accessory Buildings* shall not exceed twenty (20) feet in height. (5/??/15 ATM)

*See specific requirements of Section IV, A. 6. c. below.

c. b. Construction of a structure or building used in conjunction with a marina or boatyard. Buildings shall conform to the street setback and abutters setback for the district in which the property is located.

c. The construction and maintenance of a driveway or roadway of minimum legal and practical width where no alternative means of access from an established way is available. Plans for such construction shall be submitted to the Planning Board and Conservation Commission prior to the Zoning Board of Appeals hearing. Such driveway or roadway shall be constructed in a manner which permits the unobstructed flow of water.

- <u>d.</u> The construction and maintenance of private boat launching ramps and beaches, except on marsh areas and land containing shellfish as identified by the Shellfish Warden and the Division of Marine Fisheries, providing that no natural vegetation is destroyed.
- <u>e.</u> The installation of submerged pipes or cables used for *swimming pools* or commercial fishing operations.

4. Prohibited Uses

All activities, except those needed to accomplish the above permitted uses, shall be prohibited, including:

- a. No person shall fill, place or dump in a Conservancy Shoreline Protection District any soil, loam, peat, sand, gravel, rock or other material substance, refuse, trash, rubbish, debris or dredged material.
- b. No person shall drain, excavate or dredge in a Conservancy Shoreline Protection District or remove therefrom loam, peat, sand, soil or other material substance.
- c. No person shall discharge hazardous substances, effluent from a sewage treatment facility, or thermal effluent from a power plant or other industrial source.

- d. No person shall-construct a residential *dwelling-unit*, or use a houseboat or barge designed or used as a *dwelling-unit* in the Conservancy-Shoreline Protection District.
- e. No person shall construct any <u>building</u> in Zones V and V1-30, as defined on the Flood Insurance Rate Maps, prepared by the National Flood Insurance Program for the Town of Chatham, dated June 20, 1998. (5/11/98 ATM)
- <u>e.</u> No person shall construct any pipeline designed to carry crude oil or unprocessed natural gas in the Conservancy Shoreline Protection-District.
- <u>f.</u> No person shall perform any act or use in said <u>Conservancy Shoreline Protection</u> District in a manner which would destroy the natural vegetation of the <u>Conservancy Shoreline Protection</u> District, substantially alter the existing patterns of tidal flow, or otherwise alter or permit the alteration of the natural beneficial character of the <u>Conservancy Shoreline Protection</u> District.
- g. No person shall remove or destroy natural growth essential to the prevention of erosion and storm damage.
- h. No person shall drain, dam or relocate any water course or other drainage works, except as incidental to aquaculture, or establish agricultural use, flood control, or mosquito control.

5. Location

- a. The Coastal Conservancy Shoreline Protection Districts shall consist of all the <u>submerged lands</u> along the coast of Town, and areas subject to flooding including:
 - 1. Areas delineated as the 100-year flood plain (Zones A, AO, AH, A1-30, A99, V and V1-30 on the Flood Insurance Rate Maps, prepared by the National Flood Insurance Program for the Town of Chatham dated June 20, 1998. (5/12/14 ATM) special flood hazard areas within the Town of Chatham designated as Zone AE or VE on the Barnstable County Flood Insurance Rate Map (FIRM) issued by the Federal Emergency Management Agency (FEMA) for the administration of the National Flood Insurance Program. (ATM 5/??/15)
 - 2. When a *coastal bank* exceeds the elevation of the relevant one hundred (100) year flood plain, the Coastal Conservancy District boundary shall be the top of the bank.
- b. The Inland Conservancy Shoreline Protection District shall consist of *submerged lands* in and under all ponds, wetlands as defined in Section II of this Bylaw, and those areas lying below two (2) feet above the Natural High Water Mark of any fresh water pond, lake or water course, including:
 - 1. Those areas identified by number with corresponding elevations for the water levels of the Inland Conservancy Shoreline Protection Districts as shown on maps filed in the Town Clerk's office, entitled Conservancy—Shoreline Protection Districts, Chatham,

Massachusetts", as most recently amended.

- 2. Any area not identified by number shall be established by topographic data, to be provided by the applicant, at the request of the Zoning Agent.
- 3. When an *inland bank* of a pond, lake, or water course exceeds two (2) feet in height, the Inland Conservancy Shoreline Protection District boundary shall be the top of the bank.

6. Procedures

General Provisions

All uses and activities located within Conservancy Districts shall comply with the general administrative procedures set forth in Section VIII of this Bylaw. The Conservation Commission may also have jurisdiction over activities in Conservancy Shoreline Protection District

b. Special Permit Uses

The Zoning Board of Appeals shall act as the Special Permit Granting Authority, utilizing the procedures set forth in Chapter 40A section 9 of M.G.L. and Section VIII of this Bylaw. However, any *Special Permit use* in a *Conservancy* Shoreline Protection District shall be referred to the Conservation Commission for review and recommendation prior to the Board of Appeals hearing. In evaluating a Special Permit request, the Board of Appeals shall consider both the general purpose and intent of the Bylaw and the stated purposes of the *Conservancy* Shoreline Protection Districts

c. Private Piers (Commercial and Residential)

The Zoning Board of Appeals may authorize a Special Permit for the construction of a private *pier* if it is found that the proposed *structure* will not be detrimental to safety on waterways, preservation of water quality, ease of access to and on waterways, equity of interest in utilizing waterways, the protection of the natural environment, and the protection of the aesthetic values of the Town. The Zoning Board of Appeals shall consider, in assessing the potential impact of a proposed *pier* or pier extension, the distance of the *pier* and its approach area from designated or customary navigation channels, from designated or customary mooring areas, from areas traditionally used for sailing, and from public swimming areas. The Zoning Board shall also consider whether the proposed *pier* or pier extension is consistent with locally adopted plans, including the comprehensive plan, any applicable harbor plan, and any applicable resource management plan. The construction of private *piers* or the extension of existing piers shall be specifically prohibited in the following locations:

- In Pleasant Bay from the Town line at Jackknife Harbor to the southerly property line of 4 Minister's Lane, including Crows Pond, Ryders Cove, Frost Fish Creek, and Bassing Harbor; and
- In Chatham Harbor from the southerly property line of 4 Minister's Lane to Cow Yard Landing.

Additionally, the construction of new *private residential piers* shall be specifically prohibited in the following locations:

Marine waters located northerly of an imaginary line across the mouth of Stage Harbor Inlet, separating the Stage Harbor Complex from Nantucket Sound, including but not limited to the following waterways: Stage Harbor Inlet, Oyster Pond, Stetson Cove, Oyster River, Little Mill Pond, Mill Pond, Mitchell River and the total Stage Harbor including Snake River and all other tidal embayments within the Complex. (5/10/10 ATM)

Maintenance of existing *piers* in the above locations is permitted provided no work is done beyond the existing, licensed footprint.

All new *pier* requests shall be referred to the Town Harbormaster for written comment on the potential impact of the proposed *pier* or pier extension on existing, customary or planned boating channels or mooring areas, to the Shellfish Warden for written comment on the potential impact of the proposed *pier* or pier extension on shellfish beds or shellfish habitat, and to the Conservation Commission for written comment on, at a minimum, the potential impact of a *pier* or pier extension on fish runs, marine and shoreline ecology, marsh, and eel grass beds.

In addition, all new residential piers shall comply with the following requirements:

1. Location

- a. No new *pier* or float system shall be located closer at any point than twenty-five (25) feet to a property line, except, for a *pier* jointly owned and used by two (2) or more contiguous shorefront properties, the twenty-five (25) foot setback shall be measured from the outermost property lines of the applicable properties.
- b. No new *pier* or float system shall be located closer at any point than two hundred fifty (250) feet to another *pier*.
- c. No new *pier* shall be located closer at any point than one hundred (100) feet to a boat ramp.
- d. No new *pier* or float system shall be located closer at any point than one hundred (100) feet to a public swimming area.

2. Construction – All *private residential piers* shall be seasonal. Permanent *piers* shall not be permitted.

3. Size

- a. No *pier* shall exceed eighty (80) feet in overall length (including stairs, ramps and floats) measured from the Mean High Water (MHW) line.
- b. No stairs, *pier* or ramp shall exceed four (4) feet in width, measured outside the support *structure* (pilings, posts, railings).
- c. The total area of any and all floats associated with a pier shall not exceed three hundred (300) square feet, except a greater total area may be allowed for a pier jointly owned and used by two (2) or more contiguous shorefront properties, and there shall be no floats above the Mean Low Water (MLW).
- d. The height of the deck (walkway) shall not exceed four (4) feet above Mean High Water (MHW) unless in the interest of preserving marsh growth, a greater height is required; in which case the height above the marsh shall not exceed 1.5 times the width of the dock.
- 4. Depth of Water At Mean Low Water (MLW) there shall be, without benefit of dredging, at least two and one half (2 ½) feet of water at the end of the *pier* and/or float system. (5/9/89 ATM)
- Access At all normal levels of the tide, alongshore pedestrian passage shall be provided. A flight of stairs on each side of the *pier* may be provided for this purpose.
 (5/8/00 ATM)

d. Pre-existing Structures and Uses

- 1. Pre-existing nonconforming structures and uses in a Conservancy Shoreline Protection District shall be subject to the *nonconforming use* provisions of Section V of this Bylaw. Any alterations or expansions of preexisting conforming *structures* and uses shall comply with the Conservancy-Shoreline Protection District regulations set forth herein, including the specific locations where extensions of existing *piers* are prohibited. This prohibition shall not apply to commercial boating facilities with Chapter 91 licenses in existence as of November 21, 1998. (5/8/00 ATM)
- 2. Any expansion or enlargement of a pre-existing nonconforming *pier* shall satisfy the criteria set forth in the first paragraph of Section IV. A. 6. c. above and the Zoning Board of Appeals shall, in the granting or denial of any Special Permit to extend or enlarge such a *pier*, make findings of fact on each criteria in assessing the impact on the neighborhood.

3. Notwithstanding the above, nonconforming private *piers* may be extended seaward with a Special Permit to minimum length required to gain the required depth of water described in subsection c.3 above, provided said length does not exceed eighty (80) feet measured from the Mean High Water (MHW) line. (5/10/99 ATM)

e. Catwalks

The Zoning Board of Appeals may authorize a Special Permit for the construction of a *catwalk* if it is found that the proposed *structure* will not be detrimental to safety on waterways, preservation of water quality, ease of access to waterways, equity of interest in utilizing waterways, and the protection of the aesthetic values of the Town. In addition, all new *catwalks* shall comply with the requirements listed below.

- 1. Construction Catwalks shall have no more than one (1) handrail.
- 2. Size
 - a. The height shall not exceed the lowest elevation allowed by current Wetland Regulations (State and Town). The Conservation Commission shall state this maximum allowable height in their recommendation to the Zoning Board of Appeals.
 - b. No catwalk shall exceed three (3) feet in width.
- 3. Length Catwalks shall not extend beyond the most seaward point of the salt or fresh meadow, marsh, etc.; beyond Mean High Water (MHW); or beyond the point where a horizontal plane two (2) foot above the Natural High Water Mark of a fresh water body intersects the landform. (5/12/97 ATM)

B. Flood Plain-District

1. Purpose

The purposes of the Flood Plain District are to:

- a. Protect the public health, safety, and general welfare
- <u>b.</u> Protect human life and property from the hazards of periodic flooding flood and tidal waters which may result from unsuitable development in or near swamps, ponds, bogs and marshes, along water courses or in areas subject to flooding, eroding shorelines, extreme high tides and rising sea level
- <u>c.</u> Preserve the natural *flood* control characteristics, and the *flood* storage capacity of the flood plain.

d. Preserve and maintain the ground water table and water recharge areas within the flood plain.

2. Definitions District Location

The Flood Plain District is herein established as an overlay district. The District includes all special *flood hazard areas* within the Town of Chatham designated as Zone AE or VE on the Barnstable County Flood Insurance Rate Map (FIRM) issued by the Federal Emergency Management Agency (FEMA) for the administration of the National Flood Insurance Program. The map panels of the Barnstable County FIRM that are wholly or partially within the Town of Chatham are panel numbers 25001C0609J, 25001C0616J, 25001C0617J, 25001C0626J, 25001C0627J, 25001C0628J, 25001C0629J, 25001C0631J, 25001C0633J, 25001C0636J, 25001C0637J, 25001C0638J, 25001C0639J, 25001C0641J, 25001C0850J, and 25001C0875J dated July 16, 2014. The exact boundaries of the District may be defined by the 100-year base flood elevations shown on the FIRM and further defined by the Barnstable County Flood Insurance 5tudy (FIS) report dated July 16, 2014. The FIRM and FIS report are incorporated herein by reference and are on file with the Town Clerk, Planning Board, and Building Inspector. (ATM 5/12/14)

3. District Location Definitions

In the Flood Plain Overlay District the following definitions shall apply:

- a. "BASE FLOOD" means the flood having a one (1) percent chance of being equaled or exceeded in any given year.
- b. "DEVELOPMENT" means any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations.
- c. "FUNCTIONALLY DEPENDENT USE" means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only Functionally dependent structures are limited to docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but do not include long-term storage or related manufacturing facilities.
- d. "LOWEST FLOOR" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of State and local regulations.
- e. "MANUFACTURED HOME" means a structure, transportable in one (1) or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For flood plain management purposes the term "manufactured home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater

than one hundred eighty (180) consecutive days. For insurance purposes the term "manufactured home" does not include park trailers, travel trailers, and other similar vehicles.

- f. "NEW CONSTRUCTION" means for the purpose of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later. For flood plain management purposes, "new construction" means structures for which the "start of construction" commenced on or after May 12, 1980.
- g."STRUCTURE" means for flood plain management purposes, a walled and roofed building, including a gas or liquid storage tank that is principally above ground, as well as a mobile home. "Structure" for insurance coverage purposes, means a walled and roofed building, other than a gas or liquid storage tank that is principally above ground and affixed to a permanent site, as well as a mobile home on a foundation. For the latter purpose, the term includes a building while in the course of construction, alteration or repair, but does not include building materials or supplies intended for use in such construction, alteration or repair, unless such materials or supplies are within an enclosed building on the premises.
- h. "SUBSTANTIAL IMPROVEMENT" means repair, construction or alterations costing fifty (50) percent or more of the market value of the structure before improvement, or, if damaged, before damage occurred or in the case of a foundation, work that impacts (50) percent or greater of the perimeter of the foundation. (5/11/93 ATM) (ATM 5/??/15)

4. Lots within the Flood Plain District

- a. A lot located within the Flood Plain District may be developed in accordance with the provisions of this bylaw if the lot contained a minimum of twenty thousand (20,000) square feet of *buildable upland* prior to July 16, 2014. With the exception of functionally dependent *structures*, development is limited to those portions of the lot that are located within Zone AE, as depicted on the Barnstable County Flood Insurance Rate Map (FIRM) dated July 16, 2014.
- b. A lot or portions of a lot located within Zone VE of the Flood Plain District as depicted on the Barnstable County Flood Insurance Rate Map (FIRM) dated July 16, 2014 shall not be developed with the exception of those uses permitted under Section IV.B.5.d, Permitted Uses VE Zone and under Section IV.B.5.e, Special Permit Uses VE Zone.

4. 5. Procedures

a. Permitted Uses AE Zone

Notwithstanding any other provision of this bylaw the following uses and activities are permitted within the AE Zone of the Flood Plain District as depicted on the Barnstable County Flood Insurance Rate Map (FIRM) dated July 16, 2014.

- 1. Repair of existing foundations, unless the work constitutes a substantial improvement.
- 2. The elevation of a structure for the sole purpose of flood hazard mitigation
- 3. Repair of existing structures, provided that the repair does not constitute a *substantial improvement*
- 4. Replacement or repair of existing swimming pools, tennis/basketball courts and retaining walls; provided there is no addition or expansion to these structures.
- 5. Repair of a substantially damaged existing structure within its existing footprint.
- 6. Beach nourishment except on salt marsh areas or productive shellfish tidal flats as identified by the Division of Marine Fisheries or the local Shellfish Department; dune nourishment; non-structural bank and dune stabilization; and coastal engineering structures which are otherwise approved under MGL c. 131 Sec. 40 and the Town of Chatham Wetlands Protection Bylaw, and not prohibited by a restriction filed in the Barnstable County Registry of Deeds pursuant to MGL c. 130 Sec.105.

b. Special Permit Uses AE Zone

Notwithstanding any other provision of this bylaw, upon issuance of a Special Permit by the Zoning Board of Appeals, and subject to such special conditions and safeguards as are deemed necessary by the Special Permit Granting Authority to fulfill the purposes of this bylaw, the following uses and activities may be permitted in the AE Zone of the Flood Plain District:

- 1. New construction of residential and non-residential structures.
- 2. <u>Substantial improvement to an existing foundation, with the exception of the elevation of a structure for the sole purpose of flood hazard mitigation.</u>
- 3. Construction of functionally dependent structures
- 4. The construction of an addition or other alterations to an existing structure that results in an increase in the building footprint or constitutes a *substantial improvement*.

The following activities are allowed by Special Permit, provided a Massachusetts registered civil engineer certifies in writing that the activity will not cause an increase in wave run-up, a deflection, displacement or channelization of flood waters, or an increase in the velocity of flow:

a) An increase in impervious surface, including swimming pools, tennis/basketball and retaining walls.

c. Prohibited Uses AE Zone

The following uses are prohibited within the AE Zone of the Flood Plain District

- 1. The use of a houseboat or barge designed or used as a dwelling unit
- 2. The use of fill for structural support of buildings

d. Permitted Uses VE Zone

Notwithstanding any other provision of this bylaw the following uses and activities are permitted within the VE Zone of the Flood Plain District:

- 1. Repair of existing foundations, unless the repair constitutes a substantial improvement.
- 2. The elevation of a structure for the sole purpose of flood hazard mitigation
- 3. Repair of existing structures, provided that the repair does not constitute a *substantial improvement*.
- 4. Replacement or repair of swimming pools, tennis/basketball courts, and retaining walls, provided there is no addition or expansion.
- 5. Repair of a substantially damaged existing structure provided the work shall *not* increase building footprint or constitute a *substantial improvement*.
- 6. Beach nourishment except on salt marsh areas or productive shellfish tidal flats as identified by the Division of Marine Fisheries or the local Shellfish Department; dune nourishment; non-structural bank and dune stabilization; and coastal engineering structures which are otherwise approved under MGL c. 131 Sec. 40 and the Town of Chatham Wetlands Protection Bylaw, and not prohibited by a restriction filed in the Barnstable County Registry of Deeds pursuant to MGL c. 130 Sec. 105.

e. Special Permit Uses VE Zone

Notwithstanding any *other* provision of this bylaw, and upon issuance of a Special Permit by the Zoning Board of Appeals, and subject to such special conditions and safeguards as are deemed necessary by the Special Permit Granting Authority to fulfill the purposes of this bylaw, the following uses and activities may be permitted in the VE Zone of the Flood Plain District:

- 1. <u>Substantial improvement</u> to an existing foundation with the exception of the elevation of a structure for the sole purpose of flood hazard mitigation.
- 2. Construction of functionally dependent structures

f. Special Permit Criteria

For uses requiring a Special Permit in the Flood Plain Overlay District the special permit granting authority shall take into consideration the following in addition to the criteria set forth in Section VIII.C of the Protective Zoning Bylaw:

- 1. Extent of proposed grade change
- 2. <u>Increase of building height beyond that which is required by this bylaw and the Massachusetts State Building Code for flood hazard mitigation.</u>
- 3. Cumulative impact to neighborhood of flood hazard mitigation.

g. Prohibited Uses VE Zone

The following uses are prohibited within the VE Zone of the Flood Plain District

- 1. New construction of any residential or non-residential building with the exception of functionally dependent structures
- 2. The use of a houseboat or barge designed or used as a dwelling unit
- 3. The construction of an addition or other alterations to an existing structure that results in an increase in building footprint or constitutes a *substantial improvement*.
- 4. Repair of substantially damaged existing structure that results in an increase in building footprint or constitutes a *substantial improvement*.
- 5. Any increase in impervious surface on a residential lot. This may include, but is not limited to, swimming pools, tennis/basketball courts and retaining walls. For functionally dependent projects allowed in the VE Zone, impervious surfaces accessory to the use are allowed provided a Massachusetts registered civil engineer certifies in writing that the impervious surface will not cause an increase in wave run-up, a deflection or channelization of flood waters, or an increase in the velocity of flow.
- 6. The use of fill for structural support of buildings

5. Development Regulations

a. All development in the district including structural and non-structural activities whether permitted

by right or by Special Permit must be in compliance with the following:

- 1. Chapter 131, Section 40 of the Massachusetts General Laws. (See Wetlands Protection, 310 CMR 10.00, Department of Environmental Quality Engineering Protection)
- 2. Town of Chatham Wetlands Protection Bylaw (Chapter 272) and the Chatham Wetlands Protection Regulations
- 3. 2- The State Environmental Code Title \(\frac{\frac{1}}{5}\), Minimum Requirements for the Subsurface Disposal of Sanitary Sewage, Department of Environmental Quality Engineering Protection
- 4. Town of Chatham Board of Health Minimum Requirements for Subsurface Disposal of Sanitary Sewage
- 5. 3. The Flood Resistant Construction requirements of the Massachusetts State Building Code. (5/11/98 ATM) Massachusetts State Building Code 780 CMR Appendix G (or as amended) for floodplains and coastal dunes, and any other regulations required by the Building Inspector (ATM 5/??/15)
- b. New construction or substantial improvement of residential structures shall have the lowest floor (including basement) elevated to not less than one (1) foot above the base flood elevation. New construction or substantial improvement of non-residential structures shall either be similarly elevated or together with attendant utility and sanitary facilities be flood proofed to not less than base flood elevations. Incremental improvements shall be considered substantial improvements (see definitions) if within a five-year (5) period, they cumulatively meet the definition of "substantial improvement." (5/11/93 ATM)
- c. Where *flood* proofing is utilized a registered engineer or architect shall certify that the *flood* proofing methods are adequate to withstand the *flood* depths, pressures, velocities, impact and uplift forces and other factors associated with the *base flood*.
- d. In unnumbered A zones, in the absence of Federal Emergency Management Agency base flood elevation data, the *base flood* elevations shall be determined by obtaining, reviewing and reasonably utilizing any existing *base flood* elevation data from federal, state or other sources.
- e. <u>Utilities (including but not limited to, sewage systems, heating, electrical, ventilation, plumbing and air-conditioning)</u>
 <u>conditioning)</u>
 <u>Electrical heating, ventilation, plumbing and air-conditioning equipment and other service facilities</u> shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding. the following:
 - 1. Reflecting, redirecting, or channelizing the flow of flood water that could increase erosion and storm damage to adjacent buildings and/or infrastructure and decrease function of the floodplain.

- Adversely increasing the elevation or velocity of flood waters or increasing flows due to a change in drainage or flowage characteristics on the subject site, adjacent properties, or any public or private way
- 3. Impairing the utility or contaminating the utility during flooding.
- f. For all *new construction* and *substantial improvements*, fully enclosed areas below the *lowest floor* that are subject to flooding shall be designed to automatically equalize hydrostatic *flood* forces on exterior walls by allowing for the entry and exit of *flood* waters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria: A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one (1) foot above grade. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of *flood* waters.
- g. In all *new construction* and *substantial improvements* within Zone VE the space below the *lowest floor* must either be free of obstruction or constructed with non-supporting breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the *building* or supporting foundation system. For the purposes of this section, a breakaway wall shall have a design safe loading resistance of not less than ten (10) and no more than twenty (20) pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of twenty (20) pounds per square foot (either by design or when so required by local or State codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:
 - <u>1</u> breakaway wall collapse shall result from a water load less than that which would occur during the *base flood*; and
 - the elevated portion of the *building* and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all *building* components (structural and non-structural). Maximum wind and water loading values to be used in this determination shall each have a one (1) percent chance of being equaled or exceeded in any given year (one hundred (100) year mean recurrence interval). Such enclosed space shall be usable solely for parking of vehicles, *building* access or storage.
- h. No land within areas designated as V (Velocity) zones of the FIRM maps the Flood Plain District shall be developed unless such *development* is demonstrated by the applicant to be located landward of the reach of the mean extreme high tide. Any manmade alteration of sand dunes in the course of such *development* within said designated V zones the Flood Plain District which might increase the potential for *flood* damage shall be prohibited. Incremental improvements shall be considered

substantial improvements (see definitions) if within a five-year period, they cumulatively meet the definition of "*substantial improvement*." (5/11/93 ATM)

- i. New or replacement water and/or sewer systems shall be designed to avoid impairment to them or contamination from them during flooding.
- j. If any part of a subdivision proposal or other new *development* is located within the Flood Plain

 District established under the Zoning Bylaw it shall be reviewed by the Planning Board to assure that:
 - 1. the proposal is designed consistent with the need to minimize *flood* damage, <u>and is also</u> compliant with FEMA construction regulations, and
 - 2. all public utilities and facilities, such as sewer, gas, electrical and water systems shall be located and constructed to minimize or eliminate *flood* damage, and
 - 3. adequate drainage systems shall be provided to reduce exposure to flood hazards, and
 - 4. **base flood** elevation (the level of the 100-year **flood**) data shall be provided for proposals greater than fifty (50) **lots** or **five (5)** acres, whichever is the lesser, for that portion within the Flood Plain District, and
 - 5. Demolition debris is removed from the site within 14 days of completion and not stored within a resource area or a buffer strip. If a dumpster is used to contain the debris, the dumpster will be covered. The debris will be properly disposed of in accordance with applicable federal, state, and local regulations. No debris or trash is allowed to enter resource waters, and
 - 6. Construction material and excavation or fill materials will be stored completely outside of the Flood Plain District when possible based on the boundaries of the parcel and the boundaries of the designated floodplain. When there is no available property outside the Flood Plain District these materials will be stored in the area least likely to flood based on distance from water sources and topography, and
 - 7. Exposed, disturbed, or erodible soils will be protected to minimize erosion, sedimentation, pollution, and damage to the subject and adjacent properties.
 - k. In Zone AE, along watercourses that have not had a regulatory floodway designated, the best available Federal, State, local, or other floodway data shall be used to prohibit encroachments in floodways which would result in any increase in flood levels within the community during the occurrence of the base flood discharge, and

- New construction, additions or other alterations to existing structures and substantial
 improvements located within Zone AE of the Flood Plain District must meet the Flood-Resistant
 Construction requirements for Zone VE, and
- m. New construction, additions or other alterations to existing structures and *substantial improvements* located within the 50 foot setback to the Flood Plain District must meet the FloodResistant Construction requirements of the most restrictive abutting flood zone.
- n. Landscape material up to two feet in depth at the foundation and tapered to meet grade within ten feet of the foundation shall not be calculated towards **grade plane**.

5. Administration

- a. The Building Inspector shall review all proposed *development* within the *flood* district to assure that all necessary permits have been received from those government agencies from which approval is required by Federal or State law.
- b. The Building Inspector shall obtain and maintain records of elevation and flood-proofing levels for *new construction* or *substantial improvement* within the *flood* district.
- c. Zoning Board of Appeals
 - 1. The Board of Appeals may grant a variance from these requirements only upon:
 - a. a showing of good and sufficient cause, and
 - b. a determination that failure to grant the *variance* would result in exceptional hardship to the applicant, and
 - c. a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws, and
 - d. a determination that the *variance* is the minimum necessary, considering the *flood* hazard, to afford relief.
 - 2. A *variance* shall not be issued within any designated regulatory *flood* way if any increase in *flood* levels during the *base flood* discharge would result.

- 3. If a *variance* is granted, the Board of Appeals shall notify the applicant in writing over their signature that:
 - a. the issuance of such *variance* to construct a *structure* below the *base flood* elevation will result in increased premium rates for *flood* insurance up to amounts
 as high as twenty-five (25) dollars for one hundred (100) dollars of insurance
 coverage, and
 - b. such construction below the **base flood** level increases risks to life and property.
- 4. The Board of Appeals will maintain a record of all *variance* actions, including justification for their issuance and report such *variances* issued in the Annual Report submitted to the Federal Insurance Administration.
- 5. **Variances** may be issued for the reconstruction, rehabilitation, or restoration of **structures** listed on the National Register of Historic Places or on State Inventory of Historic Places, without regard to the procedures set forth above.
- 6. Variances for functionally dependent uses will be considered for those docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building repair facilities, but does not include long-term storage or related manufacturing facilities.

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DRAFT WARRANT ARTICLE For Submission to the Board of Selectmen for ATM 2015

Also amend, Appendix II Schedule of Dimensional Requirements as follows:

APPENDIX II Schedule of Dimensional Requirements

		Min. Parking	Setbacks	Abutters	(ft)	1011	1011	1011	1011	10^{11}	10^{11} .	15	0	10	15	0	0	0	0
MAN AND AND AND AND AND AND AND AND AND A		Min.		Road	(£)	20 ¹¹	20 ¹¹	20 ¹¹	2011	2011	20^{11}	60 ⁵	0	10	20	10	0	0	0
		Maximum Bldg.	Height	Feet		30	30	30	30	30	30	30	30	30	30	30	30	30	30
				Stories		2 %	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
				Reg.	Gree n Area	N/A	N/A	N/A	N/A	N/A	20%	20%	10%	30%	40%	70%	%06·	N/A	N/A
	Minimum Building/Structure Setbacks ^{9, 10}			Max. Bldg	Coverage	$10\%^{12}$	10%12	70% ₁₅	10%12	10%	N/A	V/N	N/A	N/A	N/A	N/A	N/A	N/A	N/A
				Max. Lot	Coverage	N/A	N/A	M/A	N/A	N/A	%05	%05	80%	%0 /	%09	%08	10%	N/A	N/A
		Conservancy	Shoreline Protection Districts ^{2, 3}	Inland	(±)		25	25	25	25	25	25	25	25	25	25	20	N/A	N/A
			Shoreline Distr	Coastal	(ft)	- 20	20	20	20	20	20	20	50	. 50	50 ·	> 05	20	N/A	N/A
				Abutter	(L)	25 ⁷	257	40 <i></i> _	15	15	15	20.	54	15	15	. 5	20	15	15
	Minim			Road	(tt)	40,	40,	40,	25	25	25	50	-54	25	$< 50^{1}$	10	. 20	25	25
				Min.	Frontage (feet)	150	150	150	100	100	100	125	50	50	100	. 50g	150	N/A	N/A
				Min. Lot	Size (sq ft)	900'09	40,000	40,000	30,000	20,000	20,000	20,000	5,000	7,000	10,000	10,000	3 acres	N/A	N/A
			, <u>,,,,,,,</u>	District		R60 ¹³	R40 ¹³	R40A ¹³	R30 ¹³	R20 ¹³	R20A ¹³	SB	GB1	GB2	GB3		RC3	Σ	M/C

¹ Except when a building is erected on a corner of two streets, a setback of fifty (50) feet shall be required on the primary street and a setback of thirty (30) feet shall be required on a secondary street.

² Nonresidential buildings and structures permitted by the Board of Appeals under Section IV. A. 3. of this Bylaw need not conform to the Gonservancy Shoreline Protection District setbacks.

Stairs, steps and walkways used as access from the top of a bank to a beach or wetland need not conform to the abutter's setback requirements; however, in no case shall the abutter's setback be less than three (3) feet.

Except single family dwellings in the GB1 District shall comply with the following setback requirements: 25 ft. road/15 ft. abutters.

Except when a lot is located on the corner of two streets, a setback of sixty (60) feet shall be required on the primary street and a setback of twenty (20) feet shall be required on the secondary street.

A building may contain either a finished basement or a finished attic but in no case shall both attic and basement areas be used as habitable space.

Except that for lots in existence prior to May 1987, a road setback of thirty (30) feet and an abutter's setback of twenty (20) feet shall be required.

⁸ Except along Route 137 (Meetinghouse Road) where the minimum frontage shall be one hundred (100) feet.

of Health), where no expansion of use is involved, shall not be required to conform to the road, abutter's and conservancy Shoreline Protection 9 Except that retaining walls which are needed to upgrade or replace existing substandard septic systems (as determined by the Board setbacks set forth herein.

¹⁰ See Section III D.3.i. for business or industrial lots which abut a residential zoning district or Route 137. (<u>10/9/97 STM</u>)

 11 For all nonresidential uses and uses accessory to the residential use. $(10/9/97~{
m STM})$

12 The maximum building coverage for all lots, whether vacant or improved with a structure, which contain thirty thousand (30,000) square feet or less or buildable of upland shall be as follows:

Maximum Building Coverage	15%, but not more than 2,800	2,850 s.f.	2,900 s.f.	2,950 s.f.	3,000 s.f.
Buildable Upland	20,000 s.f. or less	20,001 to 22,500 s.f.	22,501 to 25,000 s.f.	25,001 to 27,500 s.f.	27,501 to 30,000 s.f.

(5/16/01 ATM)

building setbacks, and maximum building coverage shall be allowed in accordance with Section VI, D.3.g. of the Town of Chatham Protective Bylaws. 13 In zoning districts where Open Space Residential Developments (OSRD) are allowed by Special Permit, the minimum lot size, lot frontage, lot shape,

^{*} R40A-Added (<u>5/16/01 ATM)</u>

Or take any other ac	tion in relation thereto (Planning Board)
Motion:	By,,,,,
Speaker:	

Explanation:

The proposed amendments contained in this warrant article aim to strike a balance between preserving certain property development rights and maintaining adequate regulatory control within the Flood Plain District and Conservancy District (Shoreline Protection District). A fundamental change being made to help clarify requirements is that, with the exception of some accessory structures, the regulation of uses and activities such as dwelling units which are also regulated by building code has been moved from the Shoreline Protection District to the Flood Plain District.

Construction allowed in the flood plain will be required to meet more stringent construction requirements than required by building code. These additional requirements are defined in the proposed amendments. This requirement is being added to decrease the risk of flood hazards for that construction which may occur primarily on lots which have already been developed within the flood plain.

New development would be regulated through a Special Permit process to ensure that adequate protections are maintained within areas susceptible to flooding and to also ensure that new development and re-development projects meet design criteria and performance standards. The Special Permit process is an important mechanism to ensure that threats to public health and safety are minimized and that the community's capacity to recover quickly after a storm event is maintained by reducing damage to personal and public property.